ATTACHMENT A

THE VERIZON TELEPHONE COMPANIES

The Verizon telephone companies are the local exchange carriers affiliated with Verizon Communications Inc. These are:

Contel of the South, Inc. d/b/a Verizon Mid-States
GTE Midwest Incorporated d/b/a Verizon Midwest
GTE Southwest Incorporated d/b/a Verizon Southwest
The Micronesian Telecommunications Corporation
Verizon California Inc.
Verizon Delaware Inc.
Verizon Florida Inc.
Verizon Hawaii Inc.
Verizon Maryland Inc.
Verizon New England Inc.
Verizon New Jersey Inc.
Verizon New York Inc.
Verizon North Inc.
Verizon Northwest Inc.
Verizon Pennsylvania Inc.
Verizon South Inc.
Verizon Virginia Inc.
Verizon Washington, DC Inc.
Verizon West Coast Inc.
Verizon West Virginia Inc.

THE NEGATIVE EFFECT OF APPLYING TELRIC PRICING TO THE UNE PLATFORM ON FACILITIES-BASED COMPETITION AND INVESTMENT

This report demonstrates how TELRIC pricing has led to a rise in the use of the UNE platform and a concomitant decrease in facilities-based competition and investment in the telecommunications industry. *First*, it describes how the TELRIC rates for the elements that make up the UNE-P have been reduced to increasingly lower levels in recent years. *Second*, it demonstrates that as use of the UNE-P at TELRIC rates has increased, there has been a decrease in facilities-based competition and in investment by competing carriers and incumbents alike. *Finally*, it shows that facilities-based competition is increasingly coming from intermodal sources such as wireless, cable, and voice over IP networks; that, in contrast, UNE-P carriers now openly tout the fact that the availability of UNE-P at TELRIC rates allows them to earn large margins without even investing in facilities; and that the availability of UNE-P at TELRIC rates has spawned a new cottage industry dedicated to exploiting the opportunity for uneconomic arbitrage.

A. The Ratcheting Down of TELRIC Rates for the UNE Platform.

In recent years, the rates for the unbundled network elements that make up the UNE platform have been reduced to increasingly lower levels. As described in more detail below, in just the last year, rates that were previously set based on the Commission's TELRIC rules were reduced yet again, in many cases by an average of as much as 20 to 40 percent in a given state – and in the case of some individual rates by as much as 80 percent or more. *See* Table 1.[1] As a result of such decreases, a December 2002 Legg Mason study found that CLECs relying on the UNE-P at TELRIC rates had average gross margins at the time ranging from 47 percent to 66 percent in virtually every Verizon state – Massachusetts, Pennsylvania, Maine, Maryland, Delaware, Rhode Island, Vermont, Virginia, New Jersey, the District of Columbia, and New York.[2] And the downward trend in prices has continued since that time. This trend is a result of a flaw in the rules themselves, which base prices on the costs of a hypothetical network rather than on the costs of the incumbents' real-world telephone networks.

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[1] *See also* A. Quinton, *et al.*, Merrill Lynch, *The Telecommunicator: Telecom Act Seven Years On* (In-Depth Report) at 19 (Sept. 23, 2002) ("*Merrill Lynch Telecommunicator Comment*") (Since the beginning of 2002, UNE-P rates have been slashed by more than 40 percent in New Jersey; more than 30 percent in California; more than 20 percent in Colorado, Idaho, Iowa, and Maine; and between 16 and 18 percent in Kentucky, Montana, North Dakota, Washington and Rhode Island).

[2] Legg Mason, *UNE-P Relief: Investors Expect Too Much* at 9 (Dec. 19, 2002).

Table 1. Overview of Recent Rate Reductions in Verizon's Region		
State	**2-wire Analog Loop**	**Local Switching**
New York	-21%	-64%
New Jersey	-41%	-78%
Pennsylvania	-18%	-84%
Massachusetts	-7%	-79%
Florida	-15%	-44%
Maine	-8%	-75%
Washington, D.C.	-60%	-88%
New Hampshire	-13%	-25%
Maryland	-17%	-56%
West Virginia	-17%	-71%
Delaware	n/a	-31%
Rhode Island	n/a	-86%
Virginia	n/a	-36%
California	-31%	-60%

1. In Verizon's region, there are five states – New York, New Jersey, Pennsylvania, Massachusetts, and Florida – in which the state commission has completed a second-generation pricing proceeding. In each case, the new pricing proceeding was completed within a few years of an earlier pricing proceeding in which the state commission had found that the initial rates it established were TELRIC-compliant. And in each case, the state commission established new rates that are significantly lower than the previous rates that were found TELRIC-compliant.

New York. The New York PSC initially established UNE rates in April 1997 that it found were TELRIC-compliant.[3] The PSC established a statewide average loop rate of $14.52 and an average switching rate of $0.003150 per minute.[4] These rates were upheld by a federal district court in New York.[5] They were subsequently found TELRIC-compliant by the FCC in the course of Verizon's section 271 application.[6] And the D.C. Circuit expressly affirmed that

[3] *See Joint Complaint of AT&T Communications of New York, Inc., MCI Telecommunications Corporation, WorldCom, Inc., d/b/a LDDS WorldCom, and the Empire Association of Long Distance Telephone Companies, Inc. Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service by New York Telephone Company and Sections of New York Telephone Company's Tariff No. 900,* Opinion and Order Setting Rates for First Group of Network Elements, 95-C-0657, 94-C-0095 & 91-C-1174, Opinion No. 97-2 (NY PSC Apr. 1, 1997); *id.* at 15 ("The case was litigated on a TELRIC basis; all parties contemplate its being decided on that basis; [and] TELRIC is certainly a reasonable approach to use."); *id.* at 13 ("Notwithstanding the court's staying of the FCC's pricing rules, the parties continued to rely on the TELRIC standard.").

[4] The rate is a weighted average of daytime, evening, and night rates of $0.003806, $0.001837, and $0.001508, respectively.

[5] *See MCI Telecomms. Corp. v. New York Tel. Co.*, 134 F. Supp. 2d 490 (N.D.N.Y. 2001).

[6] *See Application by Bell Atlantic New York for Authorization under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York,* Memorandum Opinion and Order, 15 FCC Rcd 3953, ¶¶ 242-244 (1999).

finding.[7] The PSC nonetheless initiated a new pricing proceeding in January 1999.[8] In May 2001, the administrative law judge overseeing the proceeding issued a recommended decision to establish new, significantly lower rates.[9] In January 2002, the PSC issued a UNE Order establishing final permanent rates.[10] The PSC reduced the statewide average loop rate to $11.49 and reduced the switching rates to $0.001147 per originating minute and $0.001111 per terminating minute.

New York UNE Rates			
	April 1997	**January 2002**	**% reduction**
2-wire analog loop (statewide average)	$14.52	$11.49	-21%
Local switching	$0.003150 (average rate/min.)	$0.001147 (originating rate/min.)	-64%

New Jersey. The New Jersey BPU initially established UNE rates in December 1997 that it found were TELRIC-compliant.[11] The BPU established a statewide average loop rate of $16.21 and a switching rate of $0.005418 per originating minute and $0.003207 per terminating minute. In June 2000, the BPU opened a new pricing proceeding. In November 2001, the BPU adopted new, significantly lower UNE rates.[12] The BPU adopted a statewide average loop rate of $9.52 and a switching rate of $0.002773 per originating minute and $0.002508 per terminating

[7] *See AT&T Corp. v. FCC*, 220 F.3d 607, 617 (D.C. Cir. 2000).

[8] *See Joint Complaint of AT&T Communications of New York, Inc., MCI Telecommunications Corporation, WorldCom, Inc., d/b/a LDDS WorldCom, and the Empire Association of Long Distance Telephone Companies, Inc. Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service by New York Telephone Company and Sections of New York Telephone Company's Tariff No. 900*, Order Denying Motion to Reopen Phase 1 and Instituting New Proceeding at 12, 95-C-0657, 94-C-0095, 91-C-1174 & Case 98-C-1357 (NY PSC Sept. 30, 1998).

[9] *See Proceeding on Motion of the Commission To Examine New York Telephone Company's Rates for Unbundled Network Elements*, Recommended Decision on Module 3 Issues by Administrative Law Judge Joel A. Linsider, Case 98-C-1357 (NY PSC May 16, 2001).

[10] *See Proceeding on Motion of the Commission To Examine New York Telephone Company's Rates for Unbundled Network Elements*, Order on Unbundled Network Element Rates, Case 98-C-1357 (NY PSC Jan. 28, 2002).

[11] *See Investigation Regarding Local Exchange Competition for Telecommunications Services*, Order Regarding Interconnection and Resale, Docket No. TX95120631 (NJ BPU Dec. 2, 1997); *id.* at 9 ("[T]he parties to this phase of this proceeding agree the proper basis for setting rates for interconnection and unbundled elements contemplates the use of a long-run incremental cost methodology . . . [Therefore] the Board *HEREBY ADOPTS* the principles upon which the FCC's TELRIC model is based."). AT&T and WorldCom appealed the rates set by the New Jersey BPU. *See AT&T Communications v. New Jersey, Inc. v. Bell Atlantic-New Jersey, Inc.*, Nos. 97-5762 & 98-0109, slip. op. (D.N.J. June 6, 2000). The court remanded the BPU's decision on the ground that it had not provided sufficient explanation for the cost model it adopted, but did not reach the question whether the actual rates set by the BPU complied with TELRIC. *See id.* at 27-28, 31.

[12] *See Review of Unbundled Network Element Rates, Terms and Conditions of Bell Atlantic New Jersey, Inc.*, Board Meeting Transcript, Docket No. TO00060356 (NJ BPU Nov. 20, 2001); *Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic New Jersey*, Summary Order of Approval, Docket No. TO00060356 (NJ BPU Dec. 17, 2001).

minute. The FCC found these rates TELRIC-compliant in June 2002.[13] In April 2002, AT&T and WorldCom filed a petition for reconsideration of the BPU's order. In September 2002, the BPU issued an order on reconsideration that further lowered the switching rates, to $0.001203 per originating minute and $0.001171 per terminating minute.[14]

New Jersey UNE Rates			
	December 1997	**September 2002**	**% reduction**
2-wire analog loop (statewide average)	$16.21	$9.52*	-41%
Local switching (originating per-minute rate)	$0.005418	$0.001203	-78%
*The loop rate in New Jersey was originally reduced in December 2001.			

Pennsylvania. The Pennsylvania PUC initially established UNE rates in August 1997 that it found were TELRIC-compliant.[15] The PUC established a statewide average loop rate of $16.78 and a switching rate of $0.011067 per originating minute and $0.006143 per terminating minute. In September 1999, following additional proceedings, the PUC established new, substantially lower UNE rates.[16] The PUC established a statewide average loop rate of $14.50 (which was set to decrease, and did decrease, to $13.81 effective May 2001[17]) and a switching rate of $0.001802 per originating minute and $0.001615 per terminating minute. The FCC found these rates TELRIC-compliant in September 2001.[18] The Pennsylvania PUC is now nearing completion of a third-generation pricing proceeding.

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[13] *See Application by Verizon New Jersey Inc., et al., for Authorization To Provide In-Region, InterLATA Services in New Jersey*, Memorandum Opinion and Order, 17 FCC Rcd 12275, ¶ 18 (2002).

[14] *Review of Unbundled Network Elements Rates, Terms and Conditions of Bell Atlantic - New Jersey, Inc.*, Order on Reconsideration, Docket No. TO00060356 (NJ BPU Sept. 13, 2002).

[15] *See Application of MFS Intelenet of Pennsylvania, et al.*, Final Opinion and Order, Docket Nos. A-310203F0002, *et al.* (PA PUC Aug. 7, 1997); *Application of MFS Intelenet of Pennsylvania, et al.*, Interim Order, Docket Nos. A-310203F0002, *et al.* at 13 (PA PUC Apr. 10, 1997) ("inasmuch as we have consistently used or required the use of the FCC's TELRIC methodology throughout the several phases of this proceeding, we will continue to use TSLRIC as a tool to evaluate the proposals before us and view the *FCC Order* as instructive in the proper application of a long-run incremental cost methodology."). A federal district court remanded the PUC's decision to clarify whether it followed the FCC's TELRIC rules. The district court did not review the substance of the order, but decided the case solely on the fact that the PUC called its methodology "TSLRIC" rather than "TELRIC." *MCI Telecomms. Corp. v. Bell Atlantic-Pennsylvania, Inc.*, No. 97-CV-1857 (M.D. Pa. 2000). The Third Circuit reversed and remanded the district court's decision. *See MCI Telecomms. Corp. v. Bell Atlantic-Pennsylvania, Inc.*, 271 F.3d 491, 522 (3d Cir. 2001).

[16] *See Joint Petition of NextLink Pennsylvania, Inc., et al.*, Opinion and Order, Docket Nos. P-00991648, *et al.* (Pa. PUC Sept. 30, 1999), *aff'd*, 763 A.2d 440 (Pa. Commw. Ct. 2000).

[17] *See* Verizon Pennsylvania Inc., *Services for Other Telephone Companies*, PA PUC Tariff No. 216 § 3.C.1(a).

[18] *See Application of Verizon Pennsylvania Inc., et al. for Authorization To Provide In-Region, InterLATA Services in Pennsylvania*, Memorandum Opinion and Order, 16 FCC Rcd 17419, ¶ 55 (2001).

Pennsylvania UNE Rates			
	August 1997	**September 1999**	**% reduction**
2-wire analog loop (statewide average)	$16.78	$13.81*	-18%
Local switching (originating per-minute rate)	$0.011067	$0.001802	-84%
*The $13.81 loop rate in Pennsylvania became effective May 2001.			

Massachusetts. The Massachusetts DTE set initial rates for UNEs in 1997.[19] The DTE set a statewide average loop rate of $14.98 and an average switching rate of $0.003637 per minute.[20] In March 1999, the DTE found that the rates it established were TELRIC-compliant.[21] In November 2000, while Verizon's section 271 application for Massachusetts was pending before the FCC, Verizon had to reduce the switching rates in Massachusetts to $0.00472 per originating and terminating minute in order to satisfy the FCC's benchmark test.[22] The FCC found those rates TELRIC-compliant in April 2001.[23] The D.C. Circuit subsequently upheld that determination.[24] In June 2002, Verizon was required during an FCC complaint proceeding to reduce the switching rates in Massachusetts further in order to satisfy a new benchmark based on newly adopted rates in New York.[25] In June 2003, the DTE completed a second-generation proceeding in which it adopted new rates.[26] Pursuant to that decision, the new statewide average

[19] *See Consolidated Petitions of New England Telephone Company d/b/a NYNEX, Teleport Communications Group, Inc., Brooks Fiber Communications, AT&T Communications of New England, Inc., MCI Communications Company, and Sprint Communications Company, L.P., Pursuant to Section 252(b) of the Telecommunications Act of 1996, for Arbitration of Interconnection Agreements Between NYNEX and the Aforementioned Companies,* Order, DPU 96-73/74, 96-75, 96-80/81, 96-83, 96-94 (Phase 4-D) (MA DPU June 27, 1997).

[20] The rate is a weighted average of peak-metro, peak-other, and off-peak rates of $0.004647, $0.004724, and $0.001872, respectively.

[21] *See Investigation by the Department on Its Own Motion into the Propriety of the Resale Tariff of New England Telephone and Telegraph Company d/b/a Bell Atlantic-Massachusetts, Filed with the Department on January 16, 1998, To Become Effective February 14, 1998,* Order at 16, DTE 98-15 (Phases II, III) (MA DTE Mar. 19, 1999) ("[T]he Department finds that it correctly applied the FCC's avoided cost and TELRIC methods in *Consolidated Arbitrations*.").

[22] *See* Reply Declaration of Steven E. Collins ¶¶ 4-5, *Application by Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), and Verizon Global Networks Inc., for Authorization To Provide In-Region, InterLATA Services in Massachusetts,* CC Docket No. 00-176 (FCC filed Nov. 3, 2000).

[23] *See Application of Verizon New England Inc., et al., For Authorization to Provide In-Region, InterLATA Services in Massachusetts*, Memorandum Opinion and Order, 16 FCC Rcd 8988 ¶ 20 (2001).

[24] *See WorldCom, Inc. v. FCC*, 308 F.3d 1 (D.C. Cir. 2002).

[25] *See WorldCom, Inc., Complainant, v. Verizon New England, Inc., Bell Atlantic Communications, Inc. (dba Verizon Long Distance), NYNEX Long Distance Company (dba Verizon Enterprises Solutions), and Verizon Global Networks, Inc., Defendants,* Memorandum Opinion and Order, 17 FCC Rcd 15115, ¶ 13 (2002).

[26] *See Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Pricing, Based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts*, Order, DTE

loop rate in Massachusetts is $13.99 and the new switching rate is $0.000825 per originating minute and $0.000724 per terminating minute.

Massachusetts UNE Rates			
	November 2000	**June 2003**	**% reduction**
2-wire analog loop (statewide average)	$14.98*	$13.99	-7%
Local switching	$0.003637 (average rate/min.)	$0.000825 (originating rate/min.)	-79%
*The loop rate was set earlier, in March 1999			

Florida. The Florida PSC initially established wholesale UNE rates for Verizon in January 1997 in an arbitration proceeding involving AT&T.[27] The PSC established a statewide average loop rate of $20.00 and a switching rate of $0.004000 per originating minute and $0.003750 per terminating minute. In May 1999, the PSC initiated a proceeding to establish new rates. In November 2002, the PSC issued an order adopting new rates.[28] It reduced the statewide average loop rate to $17.07 and reduced the switching rate to $0.002257 per originating and terminating minute.[29]

Florida UNE Rates			
	January 1997	**November 2002**	**% reduction**
2-wire analog loop (statewide average)	$20.00	$17.07	-15%
Local switching (originating per-minute rate)	$0.004000	$0.002257	-44%

2. There are two additional states in Verizon's region – Maine and the District of Columbia – that completed their initial pricing proceedings late relative to other states. These states have adopted rates that are significantly below the rates that were effective in the interim while these proceedings were pending.

01-20 (MA DTE July 11, 2002); *Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Pricing, Based upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts*, Order Granting Verizon and AT&T Motions for Reconsideration, in Part, and Requesting Additional Evidence, DTE 01-20 (MA DTE Sept. 24, 2002).

[27] *See Petitions by AT&T Communications of the Southern States, Inc., MCI Telecommunications Corporation and MCI Metro Access Transmission Services, Inc., for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE Florida Incorporated Concerning Interconnection and Resale under the Telecommunications Act of 1996*, Final Order on Arbitration, Docket Nos. 960847-TP, 960980-TP, Order No. PSC-97-0064-FOF-TP (FL PSC Jan. 17, 1997).

[28] *See Investigation into Pricing of Unbundled Network Elements (Sprint/Verizon Track)*, Final Order on Rates for Unbundled Network Elements Provided by Verizon Florida, Docket No. 990649B-TP, Order No. PSC-02-1574-FOF-TP (FL PSC Nov. 15, 2002).

[29] Those rates have been stayed pending Verizon's appeal to the Florida Supreme Court.

Maine. Between 1996 and February 2002, Verizon offered UNEs to CLECs in Maine at rates that had resulted from an arbitration between Verizon and AT&T.[30] The statewide average loop rate during that period was $17.53 and the average switching rate was $0.006712 per minute.[31] The Maine PUC adopted permanent UNE rates for the first time in February 2002.[32] It adopted a statewide average loop rate of $16.18, which is currently in effect. In March 2002, the Maine PUC required additional modifications to the switching rates established in the February 2002 order, lowering them considerably from those in effect before February 2002.[33] The switching rate in Maine is now $0.001680 per originating and terminating minute.

Maine UNE Rates			
	December 1996	**March 2002**	**% reduction**
2-wire analog loop (statewide average)	$17.53	$16.18	-8%
Local switching	$0.006712 (average rate/min.)	$0.001680 (originating rate/min.)	-75%

Washington, D.C. Between 1996 and December 2002, Verizon charged rates for UNEs based on the proxy rates developed by the FCC in 1996.[34] These rates included a statewide average loop rate of $10.81 and a switching rate of $0.003 per originating and terminating minute. The PSC established permanent UNE rates for the first time in December 2002.[35] It lowered the statewide average loop rate to $4.29 and the switching rate to $0.00038 per originating minute and $0.00034 per terminating minute. Following the PSC's decision, Verizon petitioned the PSC to reconsider its decision, which triggered a stay of the PSC's new rates pursuant to District of Columbia law. In the interim while that stay is pending, Verizon was required to reduce the rates to meet the FCC's benchmark test.[36] The benchmarked rates in

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[30] *See* Joint Declaration of Edward B. Dinan, Patrick A. Garzillo and Michael Anglin ¶ 19, *Application by Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services, Inc. for Authorization to Provide In-Region, InterLATA Services in Maine*, CC Docket No. 02-61 (FCC filed March 21, 2002); *AT&T of New England, Inc., New England Telephone and Telegraph Company d/b/a NYNEX Requests for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996*, Commission Decisions on Arbitrated Issues, Docket No. 96-510 (ME PUC Dec. 4, 1996).

[31] The rate is a weighted average of daytime, evening, and night rates of $0.007186, $0.008092, and $0.003840, respectively.

[32] *See Investigation of Total Element Long-Run Incremental Cost (TELRIC) Studies and Pricing of Unbundled Network Elements,* Order at 1, Docket No. 97-505 (ME PUC Feb. 12, 2002).

[33] *See Investigation of Total Element Long-Run Incremental Cost (TELRIC) Studies and Pricing of Unbundled Network Elements,* Order, Docket No. 97-505 (ME PUC Mar. 8, 2002).

[34] *See Consolidated Issues Raised in Petitions for Arbitration Pending Before the Public Service Commission*, Order No. 5, Telecommunications Arbitration Case 6 (DC PSC Nov. 8, 1996).

[35] *See Implementation of the District of Columbia Telecommunications Competition Act of 1996 and Implementation of the Telecommunications Act of 1996*, Order No. 12610, Formal Case No. 962 (DC PSC Dec. 6, 2002).

[36] *See Application by Verizon Maryland Inc., Verizon Washington, D.C. Inc., Verizon West Virginia Inc., et al., for Authorization To Provide In-Region, InterLATA Services in Maryland, Washington, D.C., and West Virginia*, Memorandum Opinion and Order, 18 FCC Rcd 5212, ¶ 81 (2003).

effect during the stay include a statewide average loop rate of $8.49 and a switching rate of $0.003 per originating and terminating minute.[37]

Washington, D.C. UNE Rates			
	December 1996	**December 2002**	**% reduction**
2-wire analog loop (statewide average)	$10.81	$4.29	-60%
Local switching (originating per-minute rate)	$0.003	$0.00038	-88%

3. In a number of states in Verizon's region, Verizon has been required to reduce its rates to levels that benchmark to the rates set in other states (typically those set in New York or New Jersey). In six states in Verizon's region – New Hampshire, Maryland, West Virginia, Delaware, Rhode Island, and Virginia – Verizon was required during the section 271 process to reduce its rates to levels that satisfy the benchmark test. In California, the state commission has not yet completed a full-scale pricing proceeding to set UNE rates for Verizon, but recently reduced the interim rates that it initially established based on TELRIC costs to benchmark to the rates set in New Jersey.

New Hampshire. The New Hampshire PUC initially set UNE rates in July 2001 that it found were TELRIC-compliant.[38] The PUC established a statewide average loop rate of $18.56 and an average switching rate of $0.003171 per minute.[39] In June 2002, while the state 271 proceeding was still underway, Verizon was required to reduce these rates in order to meet the FCC's benchmarking standard to a statewide average loop rate of $16.21 and to an average switching rate of $0.002379 per minute.[40]

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[37] *See* Order Approving Amended Interconnection Agreement, Order No. 12641, Formal Case No. TIA 99-10 (DC PSC Jan. 24, 2003), *attached to* Ex Parte Letter from Ann Berkowitz, Verizon, to Marlene Dortch, FCC, WC Docket No. 02-384 (Jan. 24, 2003).

[38] *See Petition for Approval of Statement of Generally Available Terms Pursuant to the Telecommunications Act of 1996*, Order Granting in Part and Denying in Part at 5-6, DE 97-171, Order No. 23,738 (NH PUC filed July 6, 2001) ("Our analysis of the pricing proposals in this docket is premised on a forward-looking economic cost methodology, as set forth in the [Telecommunications Act of 1996] and now interpreted in Iowa III [*Iowa Utilities Board, et al. v. FCC*, 219 F.3d 744 (8th Cir. July 18, 2000)]. Thus, it is calculated to reflect the ILEC's actual incremental costs in the future to serve competitors with the ILEC's network facilities, including whatever upgrades the ILEC chooses to implement").

[39] The rate is a weighted average of daytime, evening, and night rates of $0.003233, $0.004285, and $0.001763, respectively.

[40] *See* Letter from New Hampshire PUC to J. Michael Hickey, President, Verizon New England at 2, *Application of Verizon New England Inc., d/b/a Verizon New Hampshire, for a Favorable Recommendation to Offer InterLATA Service under 47 U.S.C. 271*, DT 01-151 (NH PUC June 14, 2002). The rate is a weighted average of daytime, evening, and night rates of $0.002425, $0.003199, and $0.001343, respectively.

New Hampshire UNE Rates			
	July 2001	**June 2002**	**% reduction**
2-wire analog loop (statewide average)	$18.56	$16.21	-13%
Local switching (average per-minute rate)	$0.003171	$0.002379	-25%

Maryland. The Maryland PSC initially set UNE rates in July 1998 that it found were TELRIC-compliant.[41] The PSC established a statewide average loop rate of $14.50 and a switching rate of $0.0038 per originating and terminating minute. In December 2002, while Verizon was preparing to file its section 271 application with the FCC, the Maryland PSC required Verizon to agree to reduce its loop rate to $12.[42] In addition, Verizon was required to reduce its average switching rate in order to meet the FCC's benchmarking standard to $0.001676 per originating and terminating minute. The Maryland PSC also is in the process of establishing new UNE rates in a proceeding that is still underway.[43]

Maryland UNE Rates			
	July 1998	**December 2002**	**% reduction**
2-wire analog loop (statewide average)	$14.50	$12.00	-17%
Local switching (originating per-minute rate)	$0.0038	$0.001676	-56%

West Virginia. The West Virginia PSC initially adopted UNE rates in April 1997 that it found were TELRIC-compliant.[44] The PSC established a statewide average loop rate of $24.58

[41] *See Petitions for Approval for Agreements and Arbitration of Unresolved Issues Arising under § 252 of the Telecommunications Act of 1996*, Order No. 74365, Case No. 8731, Phase II (MD PSC July 2, 1998); *Petitions for Approval for Agreements and Arbitrations of Unresolved Issues Arising under § 252 of the Telecommunications Act of 1996*, Order No. 73707, Case No. 8731, Phase II at 6 (MD PSC Sept. 22, 1997) ("The expert economic witnesses in this case generally agree that [TELRIC] should be used to set the prices for network elements in this proceeding.").

[42] *See* Letter from Catherine I. Riley, *et al.*, Maryland PSC, to William R. Roberts, President – Verizon Maryland, Inc. (Dec. 16, 2002).

[43] *Investigation into Recurring Rates for Unbundled Network Elements Pursuant to the Telecommunications Act of 1996*, Case No. 8879.

[44] *See Bell Atlantic-West Virginia, Inc., Petition To Establish a Proceeding To Review the Statement of Generally Available Terms and Conditions Offered by Bell Atlantic in Accordance with Sections 251, 252, and 271 of the Telecommunications Act of 1996*, Order, Case No. 96-1516-T-PC (WV PSC Apr. 21, 1997); *Bell Atlantic-West Virginia, Inc., Petition To Establish a Proceeding To Review the Statement of Generally Available Terms and Conditions Offered by Bell Atlantic in Accordance with Sections 251, 252, and 271 of the Telecommunications Act of 1996*, Order at 9, Case No. 96-1516-T-PC (WV PSC Oct. 31, 1997) (concluding that the rates Verizon had adopted pursuant to the PSC's earlier orders "were based upon TELRIC-compliant cost studies"). The West Virginia PSC approved Verizon's revisions to its Statement of Generally Available Terms and Conditions, reflective of the April 21, 1997 Order, on April 16, 1999. *See Petition To Establish a Proceeding to Review the Statement of Generally Available Terms and Conditions Offered by Bell Atlantic in Accordance with Sections 251, 252 and 271 of the Telecommunications Act of 1996; Petition for Arbitration of Unresolved Issues from the Interconnection Negotiations between AT&T and Bell Atlantic; Petition for Initiation of Proceeding Pursuant to Section 271 of the*

and a switching rate of $0.008868 per originating minute and $0.005622 per terminating minute. In October 2002, during the course of the section 271 proceeding in West Virginia, Verizon entered into a Joint Stipulation with the Staff of the West Virginia PSC that required Verizon to reduce its statewide average loop rate and its switching rates to meet the FCC's benchmarking standard.[45] The new statewide average loop rate is $20.41 and the new switching rate is $0.002586 per originating minute and $0.002505 per terminating minute.

West Virginia UNE Rates			
	April 1999	**December 2002**	**% reduction**
2-wire analog loop (statewide average)	$24.58	$20.41	-17%
Local switching (originating per-minute rate)	$0.008868	$0.002586	-71%

Delaware. The Delaware PSC adopted initial rates for UNEs in July 1997 that it found were TELRIC-compliant.[46] The PSC established a statewide average loop rate of $12.03 and a switching rate of $0.003634 per originating minute and $0.001927 per terminating minute. In August 2002, while Verizon's section 271 application for Delaware was pending before the FCC, Verizon was required to reduce the switching rates in Delaware to meet the FCC's benchmarking standard to $0.002507 per originating minute and $0.001330 per terminating minute.[47]

Delaware UNE Rates			
	July 1997	**August 2002**	**% reduction**
2-wire analog loop (statewide average)	$12.03	$12.03	n/a
Local switching (originating per-minute rate)	$0.003634	$0.002507	-31%

Telecommunications Act of 1996, Commission Order, Case Nos. 96-1516-T-PC, 96-1561-T-PC, 96-1009-T-PC (Apr. 16, 1999).

[45] *See* Joint Stipulation and Agreement for Settlement, *Inquiry into Verizon West Virginia Inc.'s Compliance with the Conditions Set Forth in 47 U.S.C. § 271(c)*, Case No. 02-0809-T-P (WV PSC filed Oct. 15, 2002); *Petition for Declaratory Ruling That Pricing of Certain Additional Unbundled Network Elements (UNEs) Complies with Total Element Long-Run Incremental Cost (TELRIC) Pricing*, Commission Order, Case No. 01-1696-T-PC (WV PSC Dec. 18, 2002).

[46] *See Application of Verizon Delaware, Inc. for Approval of Its Statement of Terms and Conditions under Section 252(f) of the Telecommunications Act of 1996*, Findings, Opinion & Order No. 4542, Docket No. 96-324 (DE PSC July 8, 1997); *id.* at 50 (adopting "as appropriate for determining the justness and reasonableness of SGAT rates in Delaware the FCC's Total Element Long Incremental Cost ('TELRIC') pricing methodology.").

[47] *See* Letter from Julia A. Conover, Verizon Vice President and General Counsel – Delaware, to Delaware Public Service Commission Secretary Karen Nickerson, *Inquiry into Verizon Delaware Inc.'s Compliance with the Conditions Set Forth in 47 U.S.C. § 271(c)*, Docket No. 02-001 (Aug. 30, 2002).

Rhode Island. The Rhode Island PUC established initial UNE rates in May 2001.[48] It set the statewide average loop rate at $13.93 and the average switching rate at $0.009134 per minute.[49] In February 2002, while Verizon's section 271 application for Rhode Island was pending before the FCC, Verizon was required to reduce the switching rates in Rhode Island to meet the FCC's benchmarking standard to $0.001358 per originating minute and $0.001192 per terminating minute.[50] The Rhode Island PUC also is now in the process of establishing new UNE rates.

Rhode Island UNE Rates			
	May 2001	**February 2002**	**% reduction**
2-wire analog loop (statewide average)	$13.93	$13.93	n/a
Local switching	$0.009134 (average rate/min.)	$0.001358 (originating rate/min.)	-86%

Virginia. In Virginia, the state commission set permanent UNE rates for the first time in April 1999.[51] It set a statewide average loop rate of $13.76 and a switching rate of $0.004129 per originating minute and $0.002079 per terminating minute. In October 2002, while Verizon's section 271 application for Virginia was pending before the FCC, Verizon was required to reduce the switching rates in Virginia to meet the FCC's benchmarking standard to $0.002643 per originating minute and $0.001331 per terminating minute.[52] In addition, the FCC is now in the process of establishing new UNE rates in Virginia in the Virginia arbitration proceeding.[53]

Virginia UNE Rates			
	April 1999	**October 2002**	**% reduction**
2-wire analog loop (statewide average)	$13.76	$13.76	n/a
Local switching (originating per-minute rate)	$0.004129	$0.002643	-36%

[48] *See Total Element Long Run Incremental Cost - Final Rates for Verizon-Rhode Island*, Order, Docket No. 2681 (RI PUC May 18, 2001).

[49] The rate is a weighted average of peak and off-peak rates of $0.011490 and $0.003890, respectively.

[50] *See Application by Verizon New England Inc., et al., for Authorization To Provide In-Region, InterLATA Services in Rhode Island*, Memorandum Opinion and Order, 17 FCC Rcd 3300, ¶ 26 (2002).

[51] *See Ex Parte: To Determine Prices Bell Atlantic-Virginia, Inc. Is Authorized To Charge Competitive Local Exchange Carriers in Accordance with the Telecommunications Act of 1996 and Applicable State Law*, Final Order, Case No. PUC970005 (VA SCC Apr. 15, 1999).

[52] *See* Ex Parte Letter from Ann D. Berkowitz, Verizon Project Manager – Public Affairs to Marlene Dortch, Secretary – Federal Communications Commission, *Application by Verizon for Authorization To Provide In-Region, InterLATA Services in State of Virginia*, WC Docket No. 02-214 (Oct. 3, 2002).

[53] *Petition of WorldCom, Inc., for Preemption of Jurisdiction of the Virginia State Corporation Commission Pursuant to Section 252(e)(5) of the Telecommunications Act of 1996 and for Arbitration of Interconnection Disputes with Verizon-Virginia, Inc.*, CC Docket No. 00-218.

California. The California PUC initially established interim UNE rates for Verizon consistent with the FCC's rules in an arbitrated agreement with AT&T in January 1997.[54] The PUC established a statewide average loop rate of $16.81 and a switching rate of $0.003629 per originating and terminating minute. In March 2003, the PUC adopted new interim rates based on Verizon's rates in New Jersey.[55] Pursuant to that decision, the new statewide average loop rate is $11.62 and the switching rate is $0.001457 per originating and terminating minute. These rates are subject to true-up pending the adoption of permanent rates. The PUC is expected to begin a new pricing proceeding to establish permanent rates in August 2003.

California UNE Rates			
	January 1997	**March 2003**	**% reduction**
2-wire analog loop (statewide average)	$16.81	$11.62	-31%
Local switching (originating per-minute rate)	$0.003629	$0.001457	-60%

4. Rates in states outside of Verizon's region also have systematically ratcheted down. *See* Table 2. Since the beginning of 2002 alone, UNE-P rates have decreased by more than 30 percent in Arizona, Indiana and California; by more than 20 percent in Idaho, Wisconsin, Utah and Kentucky; and between 17 and 20 percent in Iowa, Georgia, Washington, Illinois, North Dakota and Nebraska.[56] Data on recent levels of UNE rates collected by the National Regulatory Research Institute show that from January 2002 to January 2003, the national average UNE-P rate dropped 15 percent, while the average loop rate dropped more than 8 percent.[57]

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[54] *See Petition of AT&T Communications of California, Inc. for Arbitration Pursuant to Section 252 of the Federal Telecommunications Act of 1996 To Establish an Interconnection Agreement with GTE California, Incorporated,* Opinion Approving Arbitrated Agreement, Application No. 96-08-041, Decision No. 97-01-022 (CA PUC Jan. 13, 1997); *Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Interim Opinion Adopting in Part and Ordering Modifications to Round I and II Cost Studies Submitted by Pacific Bell and GTE California Incorporated, Decision No. 96-08-021, R.93-04-003 (CA PUC Aug. 2, 1996); *see also Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Opinion, Decision No. 98-12-079, *Opinion*, R.93-04-003 (CA PUC Dec. 17, 1998) (adopting nonrecurring UNE costs); *Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Order Granting Limited Rehearing to Modify Decision (D.) 98-12-079 and Denying Rehearing of Modified Decision, Decision No. 99-06-060, R.93-04-003 (CA PUC June 10, 1999) (modifying nonrecurring UNE costs).

[55] *See Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks*, Interim Opinion Establishing Interim Rates for Network Elements of Verizon California, Modifying Interim Price Floor Formula Adopted in Decision 99-12-018, and Adopting Nonrecurring Prices, Decision No. 03-03-033, R.93-04-003 (CA PUC Mar. 13, 2003).

[56] *See* M. Bartlett, *et al.*, Banc of America, *UNE-P Competition: Assessing RBOC Vulnerability* at 7 (Feb. 27, 2003); *Merrill Lynch Telecommunicator Comment* at 19.

[57] *See* Billy Jack Gregg, *A Survey of Unbundled Network Elements in the United States*, National Regulatory Research Institute (July 2002 & Jan. 2003).

Table 2. Rate Reductions Outside of Verizon's Region January 2002 through January 2003			
State	**UNE-P**	**State**	**UNE-P**
Arizona	-37%	Nebraska	-17%
Indiana	-34%	Montana	-15%
California	-32%	Alabama	-14%
Idaho	-23%	Florida	-13%
Wisconsin	-23%	Wyoming	-13%
Utah	-22%	Louisiana	-11%
Kentucky	-22%	New Mexico	-9%
Iowa	-20%	North Carolina	-8%
Georgia	-20%	South Carolina	-8%
Washington	-19%	Tennessee	-6%
Illinois	-19%	Mississippi	-4%
North Dakota	-19%	Oklahoma	-3%
Sources: M. Bartlett, *et al.*, Banc of America, *UNE-P Competition: Assessing RBOC Vulnerability* at 7 (Feb. 27, 2003); *Merrill Lynch Telecommunicator Comment* at 22.			

B. The Negative Effect of the UNE Platform at TELRIC Rates on Investment and Facilities-Based Competition.

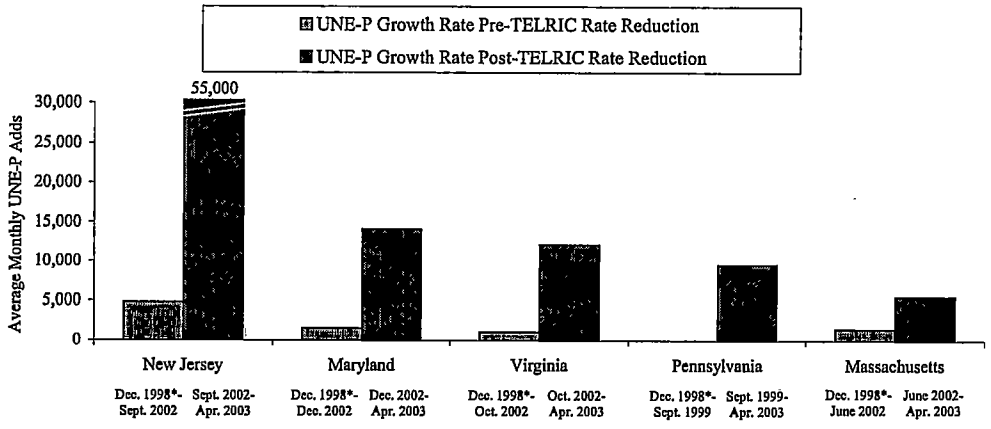
As TELRIC rates have been ratcheted down, the use of the UNE platform has exploded. This has led to a significant decrease in investment in the telecommunications industry, both by incumbents and competing carriers. Competitors have significantly curtailed the use of their existing facilities to serve customers and have begun to rely instead on the TELRIC-priced UNE-P. This shift from facilities-based competition to the UNE-P is now occurring even for customers that competitors have traditionally served using their own facilities. And while the main UNE-P carriers have argued that the widespread use of the UNE-P ultimately would lead to facilities-based competition, these carriers have failed to migrate customers to their own facilities and now openly tout the fact that they don't need to make *any* investment to reap large margins. In fact, the arbitrage opportunity TELRIC has created is so great that it has even spawned the creation of a cottage industry dedicated to helping companies use the UNE-P to earn large margins without making any investment.

1. *As TELRIC rates have been ratcheted down, the use of the UNE platform has exploded.* According to the FCC's most recent local competition report, since the beginning of 2000 – which is to say, since TELRIC rates have been reduced in most states – the total number of UNE-P lines nationwide has grown from fewer than 500,000 to more than 10 million, an increase of approximately 2,000 percent.[58] And although the FCC's report does not provide totals of UNE-P lines by state, Verizon's state-specific data demonstrate that the rise of UNE-P is directly traceable to the lowering of TELRIC rates. For example, the average number of lines that competitors are adding monthly using UNE-P has grown by more than 1,000 percent in New

[58] *See* Ind. Anal. & Tech. Div., FCC, *Local Telephone Competition: Status as of December 31, 2002* at Table 4 (June 2003) ("*2002 Local Competition Report*").

Jersey, Pennsylvania, and Virginia, by more than 800 percent in Maryland, and by more than 250 percent in Massachusetts, in the periods following rate reductions in those states. *See* Figure 1.

Figure 1. Use of the UNE Platform Has Risen Rapidly After TELRIC Rates Have Been Reduced



*Start date is based on earliest available data. Middle date is date of TELRIC rate reduction. End date is most currently available data.

2. *As use of the UNE-P at TELRIC rates has increased, investment by all telecom carriers, incumbent LECs and competing carriers alike, has declined significantly. See* Figure 2. According to a recent report by Skyline Marketing Group, between 2000 and 2002, overall investment by wireline telecommunications carriers declined from $104.8 billion to $42.8 billion – a reduction of over $60 billion in just two years.[59] *See* Figure 2. According to UBS Warburg, Bell company capital expenditures fell 4 percent from 2000 to 2001, and 35 percent from 2001 to 2002.[60] According to ALTS, capital expenditures by competitive telecom carriers decreased by 19 percent and 56 percent, respectively, over those same periods.[61] Analysts also expect further declines in 2003. Lehman Brothers reports that total capital spending in the telecom sector is expected to fall another 15 percent in 2003.[62] The *Wall Street Journal* recently reported that "spending on equipment by the six major telecom operators that have reported was down an average of 19% in the first quarter [of 2003] compared with the same period the year before, widely considered to be the worst year in the telecom industry's history."[63]

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[59] *See* Skyline Marketing Group, *CapEx Report: 2002 Annual Report*, Carrier Data Sheet 1 (June 2003); *see also* TIA, *2003 Telecommunications Market Review and Forecast* at 56 – Tables II-4.1 & II-4.2 (2003) (Spending by carriers on telecommunications equipment decreased by 26.2 percent in 2001 (from $58B to $43B) and by 49.1 percent in 2002 (from $43B to $22B)).

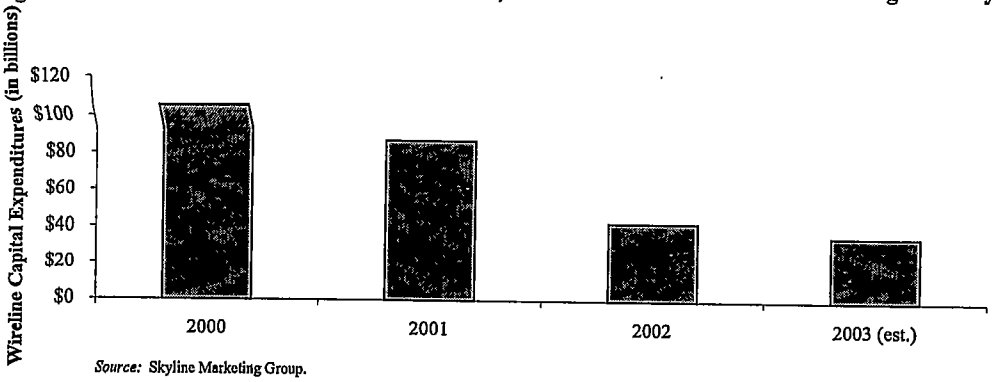
[60] J.C. Hodulik, *et al.*, UBS Warburg, *Are the Bells Growing Less Profitable* at 41 (Apr. 16, 2003).

[61] ALTS, *The State of Local Competition 2003* at 10 (Apr. 2003) ("*ALTS 2003 Report*").

[62] S. Levy, *et al.*, Lehman Brothers, Inc. Investext Rpt No. 7398937, Spenders & Vendors – Steady as She Goes: March Quarter Spendin at *4 (May 19, 2003).

[63] A. Latour, *et al.*, *A Wrong Number for Telecom: Big Operators Cut Spending 19%*, Wall St. J. (Apr. 28, 2003).

Figure 2. As TELRIC Rates Have Been Reduced, Telecom Investment Has Declined Significantly



Source: Skyline Marketing Group.

The decline in telecom investment has significant ramifications for the United States economy as a whole, because the telecom sector accounts for a substantial share of all capital spending in the U.S. At its peak in the year 2000, the telecom sector as a whole was investing about $110 billion per year, and thus accounted for about 10 percent of all annual capital spending in the United States.[64] But the TELRIC and UNE-P rules have so significantly devalued the telecom sector that this level of investment is no longer sustainable. As Scott Cleland of the Precursor Group has concluded, "the macroeconomic consequences of the FCC's TELRIC fiat was to devalue three quarters of the Nation's telecom infrastructure by two-thirds."[65] Indeed, the market capitalization of the telecommunications and equipment manufacturing sectors has declined by some $2 trillion since 2000.[66] Chairman Powell himself has recognized this decline.[67]

3. *In addition to reducing investment, competitors also have significantly curtailed the use of even their existing facilities and are relying instead on the UNE platform.* This is evident from the recent decrease in the use of CLECs' own existing switching facilities to serve customers. For example, in just eight of the states where carriers now make extensive use of the UNE-P, competing carriers connected more than 55,000 fewer lines per month in 2002 to their own switches using unbundled loops than they did in 2000 – a difference of more than 600,000

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[64] U.S. Census Bureau, *Annual Capital Expenditures: 2001* at 10-11 (Jan. 2003).

[65] *Hearings before the Subcommittee on Telecommunications Trade & Consumer Protection of the House Commerce Comm.*, 106th Cong. 2 (May 25, 2000) (Written statement of Scott Cleland, Managing Director, The Precursor Group).

[66] *See, e.g.*, S. Rosenbush, *et al.*, *Inside the Telecom Game*, Business Week (Aug. 5, 2002) ("Investors have lost some $2 trillion [in telecom] as stock prices have tumbled 95% or more from their highs."); P. Starr, *The Great Telecom Implosion*, The American Prospect (Sept. 9, 2002) ("Out of the $7 trillion decline in the stock market since its peak, about $2 trillion have disappeared in the capitalization of telecom companies.").

[67] *See The Financial Turmoil in the Telecommunications Marketplace; Maintaining the Operations of Essential Communications Facilities*, Hearing of the United States Senate Committee on Commerce, Science, and Transportation, Washington, D.C. (July 30, 2002) (Testimony of FCC Chairman Michael Powell: "This is an industry where . . . approximately $2 trillion of market value has been lost in the last 2 years.").

fewer lines over the course of the year. *See* Table 3.[68] Data compiled by the FCC for all states show the same trend. *See* Figure 3. During this same time period, the number of UNE-P lines nationwide increased by approximately 2,000 percent, from roughly half a million to more than 10 million.[69] And this trend is only increasing. Indeed, in the Verizon states where the rise of UNE-P began the earliest – New York and Pennsylvania – the average number of lines added monthly using CLEC switches with unbundled loops declined by 50 percent in the first year after the rise of UNE-P (2000-2001) and by 60 percent in the second year. Whereas competitors in those two states were obtaining an average of 26,000 lines monthly in 2000 using their own switches together with unbundled loops, that figure has declined to less than 5,000 today. Outside of Verizon's region, the story is the same: from the beginning of 2001 through the end of 2002, the average number of new lines that CLECs added monthly using their own switches together with unbundled loops declined by 120 percent in BellSouth's region, and by more than 70 percent in SBC's region.[70]

Table 3. The Declining Use of CLEC Switches Together with Unbundled Loops

	Average Monthly UNE-Loop Net Adds		
	2000	**2002**	**Change (2000-2002)**
New York	12,590	3,800	-70%
New Jersey	2,169	285	-87%
Massachusetts	4,439	616	-86%
Georgia*	2,931	-2,150	-173%
Florida*	5,643	-346	-106%
Illinois**	10,786	2,004	-81%
California**	18,390	3,265	-82%
Texas**	5,740	115	-98%
Eight-State Total	**62,688**	**7,588**	**-88%**

*BellSouth data. **SBC data.

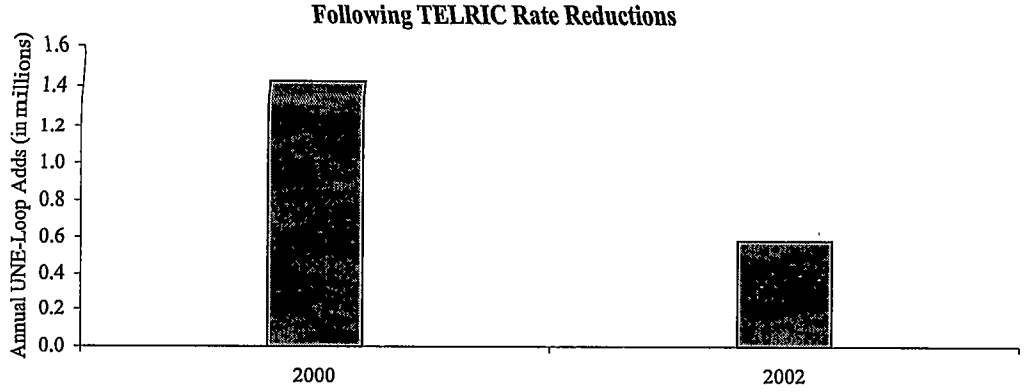
Sources: Selected RBOC Local Telephone Data, available at: http://www.fcc.gov/wcb/iatd/comp.html (RBOC_Local_Telephone_Dec_1999.xls; RBOC_Local_Telephone_Dec_2000.xls; RBOC_Local_Telephone_Dec_2001.xls; RBOC_Local_Telephone_Dec_2002.xls).

[68] *Selected RBOC Local Telephone Data, available at:* http://www.fcc.gov/wcb/iatd/comp.html (RBOC_Local_Telephone_Dec_1999.xls; RBOC_Local_Telephone_Dec_2000.xls; RBOC_Local_Telephone_Dec_2001.xls; RBOC_Local_Telephone_Dec_2002.xls).

[69] *See 2002 Local Competition Report* at Table 4.

[70] *See Selected RBOC Local Telephone Data*, available at: http://www.fcc.gov/wcb/iatd/comp.html (RBOC_Local_Telephone_Dec_2001.xls; RBOC_Local_Telephone_Dec_2002.xls). Data for SBC exclude Nevada.

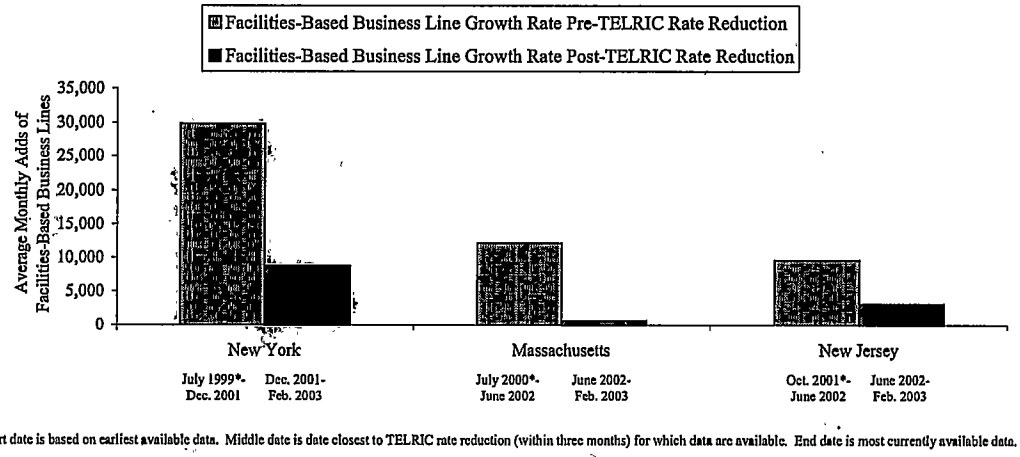
Figure 3. CLECs Have Significantly Curtailed the Use of Their Own Switches Following TELRIC Rate Reductions



Source: Ind. Anal. & Tech. Div., FCC, *Local Telephone Competition: Status as of December 31, 2002* at Table 4 (June 2003).

4. *The negative effect of the UNE-P at TELRIC rates on facilities-based competition is now occurring even in business markets, where CLECs once relied almost entirely on their own facilities to serve customers.* As the use of the TELRIC-priced UNE-P to serve business customers has rapidly increased, the use of facilities-based alternatives has declined. In New York, for example, the average number of business lines that CLECs have added monthly on their own switching facilities (using either their own loop or an unbundled loop) has declined by more than 70 percent in the period following the most recent rate reduction in that state. *See* Figure 4. In Massachusetts and New Jersey, the comparable figures are 95 percent and 45 percent, respectively. *See id.* This has occurred as the use of UNE-P to serve business customers has exploded. For example, between year-end 2001 and February 2003, the percentage of CLEC business lines in Verizon's region served through the UNE-P has more than doubled (from 6 percent to 13 percent).

Figure 4. The Growth of Facilities-Based Business Lines Has Slowed Significantly Following TELRIC Rate Reductions



*Start date is based on earliest available data. Middle date is date closest to TELRIC rate reduction (within three months) for which data are available. End date is most currently available data.

5. *Competing carriers are not migrating UNE-P customers to their own facilities and now widely tout the fact that they don't plan to make new investment.* Until very recently, the competing carriers that rely most heavily on TELRIC-priced UNE platforms have argued that policies promoting widespread unbundling and extremely low wholesale rates were necessary to promote facilities-based competition. AT&T stated in early 2002, for example, that "[t]he availability of UNEs will . . . promote facilities-based service for residential customers."[71] Its rationale was that a CLEC "cannot rationally invest in switches . . . until they have used UNE-P to build up a customer base."[72]

But the very same carriers who made these arguments have failed to migrate customers to their own facilities, and have even given up the pretense that they will do so. Indeed, the UNE-P carriers now assure investors that their business plans involve little risk because they permit CLECs to compete without making *any* investment in their own competitive facilities. UNE-P at TELRIC rates allows CLECs to avoid "making economic sacrifices" (AT&T); it requires "very little capital" (WorldCom); it "allows us to avoid significant capital investments in network facilities (Z-Tel); it "allows us to earn attractive gross margins" "without the need for costly network infrastructure" (Talk America).[73] Future profitability is assured, these carriers openly boast, by the price gap that regulators will maintain between wholesale and retail rates.[74]

In fact, the arbitrage opportunity TELRIC has created is so great that it even has spawned the creation of a cottage industry of telecom consultants dedicated to helping companies "become a UNE-P CLEC" in order to take advantage of the "50% to 70% Net Profit Available" in an environment where "no equipment investment is required!"[75] One consultant – ISG – informs potential UNE-P carriers that "no switching equipment is required, but instead you lease ports on the ILEC's switches for a fraction of the cost of purchasing equipment," which produces

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[71] Comments of AT&T Corp., Inc. at V-VI, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 01-338 (FCC filed Apr. 5, 2002).

[72] Ex Parte Letter from Robert W. Quinn, AT&T, to William F. Caton, FCC, CC Docket No. 01-347 (Mar. 1, 2002).

[73] *Q2 2002 AT&T Earnings Conference Call – Final*, Fair Disclosure Wire, Transcript 072302au.729 (July 23, 2002) (AT&T Consumer Services president and CEO Betsy Bernard: UNE-P gives AT&T "unmatched leverage to create offers . . . *without making economic sacrifices.*") ("*AT&T 2Q Earnings Conference Call*"); Wayne Huyard, Chief Operating Officer, MCI, *Using UNE-P To Develop a Strong and Profitable Local Presence*, Goldman-Sachs Telecom Issues Conference, New York, NY (May 7, 2002) (WorldCom is "deploying *very little capital*" to provide UNE-P service) (emphasis added); Z-Tel, 2001 Annual Report at ii ("[O]ur UNE-P-based business model allows us to avoid significant capital investments in network facilities."); Talk America, 2000 Annual Report at 7 ("Talk America can now lease the necessary elements of the Bell network – without the need for costly network infrastructure, which allows us to earn attractive gross margins.").

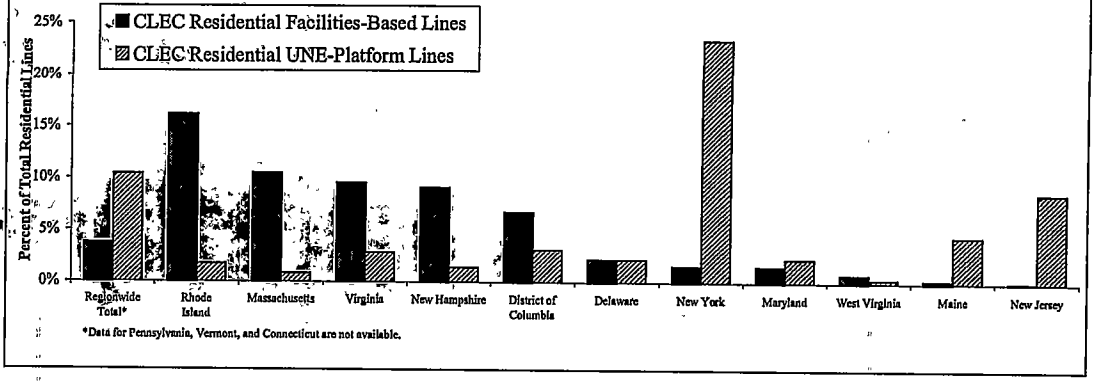
[74] *See, e.g., AT&T 2Q Earnings Conference Call* (AT&T Consumer Services President and CEO Betsy Bernard: "[W]e are not going into states where we don't have a gross margin of 45 percent on the local. That's kind of our threshold trigger to go in and we are not going to go in on the hope and the prayer that next year or two years from now, the rates may change to make it favorable to the strategy that we're executing.").

[75] A+ American Discount Telecom, *50% to 70% Net Profit Available to Competitive Telephone Companies*, http://a-adt.com (visited June 3, 2003); *see also* A+ American Discount Telecom, *The U S Supreme Court Wants CLEC's To Make More Money with UNE-P! You Don't Need Resale Anymore!*, http://a-adt.com/une-p/clec.html (visited June 3, 2003); CLEC Strategies, http://www.clecstrategies.com; The Northridge Group, http://www.northridgegroup.com.

"profit margins" that "range from 50-90%."[76] It states that "the BIGGEST benefit with the UNE-P/CLEC arrangement" is the ability to collect access charges from long distance carriers, and provides a "calculator" to let carriers estimate their potential revenue, which it states should average "$10/month in revenue per line" for the average residential customer, and "$40/month per line" for the average business customer – enough to "pay their ILEC bills [just with the access charges they receive] and keep all of the revenue they collect from their End Users."[77] Demand appears to be so high for ISG's services that it "has had to limit the number of new clients becoming part of our membership group to ten (10), new clients per month."[78]

Contrary to claims that high levels of UNE-P usage would lead to more facilities-based competition, the opposite is now occurring. For example, the states in Verizon's region where TELRIC rates have been reduced the most – and which as a result now have the highest levels of residential UNE-P usage – have the lowest levels of facilities-based residential competition. The states with the highest residential UNE-P penetration in Verizon's region are New York and New Jersey where residential UNE-P lines represent 30 percent and 10 percent of Verizon's residential lines in those states, respectively. Each of these states has low levels of facilities-based residential lines, which in each case represent 2 percent or less of the total residential lines in the state. *See* Figure 5. Conversely, the level of residential UNE-P is lowest in those residential markets where levels of facilities-based residential competition are relatively high. The four Verizon states with the most facilities-based residential lines in proportion to the BOC access lines in each state are Rhode Island, Massachusetts, Virginia, and New Hampshire. The residential UNE-P penetration in each of these states is among the lowest in Verizon's region, in each case representing less than 3 percent of the residential access lines in the state. *See id.*

Figure 5. Most States with High Levels of Facilities-Based Residential Competition Have Low UNE-P Usage, Whereas Most States with Low Levels of Facilities-Based Competition Have High UNE-P Usage



6. *CLECs have not only failed to migrate UNE-P customers to their own facilities, but in a number of instances have done the reverse – moved existing customers from their own*

[76] ISG Telecom, *Revenues for the UNE-P CLEC*, http://www.isg-telecom.com (click on link "UNE-P CLEC").

[77] *Id.*

[78] *Id.*

facilities to UNE platforms. For example, in Verizon's region, between June and September of 2002, nine carriers in four Verizon states (Pennsylvania, New York, Virginia, and Maryland) migrated several hundred business lines from their own facilities to UNE-P.[79] Publicly filed data likewise show that the number of lines that competitors are serving entirely over their own facilities is decreasing at the same time that use of the UNE-P is increasing, which suggests that some carriers have begun to move *existing* customers that they were serving using their own facilities to UNE platform arrangements. According to the FCC's Local Competition Report, the number of "CLEC-owned" lines (*i.e.*, "lines provided over CLEC-owned last-mile facilities") increased from 5.2 million to 6.4 million between December 2000 and December 2002, while the subset of those totals provided through "coaxial cable" (*i.e.*, cable telephony) increased from 1.1 million to 3 million.[80] That means that the number of CLEC-owned lines other than those provided through cable telephony decreased from 4.1 million to 3.4 million during that period, while the number of UNE-P lines increased from 2.8 million to 10.2 million.

C. The Development of Local Competition.

Today, facilities-based competition increasingly is coming from intermodal sources – such as wireless, cable, and voice over IP networks. These intermodal sources are competing against traditional wireline networks in two significant respects – by taking customer lines, and, even where they do not necessarily take a line, by taking traffic minutes.

Today, a large and growing number of customers are abandoning their wireline phone service for a wireless phone, and an even larger share of traffic minutes are migrating to wireless networks.[81] As Chairman Powell recently found, "much of the most significant competition in voice . . . has come from wireless phone service."[82] The FCC itself has recognized that wireless is now competitive with primary line wireline services for a large and growing segment of the population.[83] A January 2002 *USA Today*/CNN/Gallup poll found that 18 percent of cell phone

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[79] *See, e.g.*, UNE Rebuttal Report 2002 at 31, n.161, *Review of the Section 251 Unbundling Obligation of Incumbent Local Exchange Carriers*, CC Docket Nos. 01-338, *et al.* (FCC filed Oct. 23, 2002) ("[B]etween June and September of [2002], nine carriers in four Verizon states (Pennsylvania, New York, Virginia, and Maryland) have migrated several hundred business lines from their own facilities to UNE-P. SBC also has begun to receive requests for conversions of UNE-loop lines to the UNE-P."); Letter from William Barr, Verizon, to Michael Powell, FCC, at 17-18, *attached to* Ex Parte Letter from Ann Berkowitz, Verizon, to Marlene Dortch, FCC, CC Docket No. 01-338 (Oct. 16, 2002) ("several carriers (including one of the largest) have sought to move customers off their own switches and on to the UNE-platform.").

[80] *See 2002 Local Competition Report* at Tables 5 & 10; Ind. Anal. Div., FCC, *Local Telephone Competition: Status as of December 31, 2000*, at Table 5 (May 2001).

[81] *See, e.g.*, C. Govlin, *et al.*, Forrester Research, *Sizing US Consumer Telecom* at 6 (Jan. 2002) ("Lower costs for wireless service, widespread broadband availability, and an absence of fixed-line innovation will flatline the POTS business. A second wave of displacement – pushing voice to broadband networks and making wireless the preferred data channel – will further erode dependence on the original Bell network.").

[82] Michael K. Powell, Chairman, FCC, *Competition Issues in the Telecommunications Industry*, Written Statement before the Committee on Commerce, Science, and Transportation, United States Senate (Jan. 14, 2003).

[83] *See Application by SBC Communications Inc., et al., for Authorization to Provide In-Region, InterLATA Services in Nevada*, Memorandum Opinion and Order, 18 FCC Rcd 7196, ¶ 15 (rel. Apr. 14, 2003) (finding that broadband PCS "represents an actual commercial alternative to [a BOC] for residential telephone exchange services.").

users "use cell phones as their primary phones."[84] A study by wireless provider Leap Wireless "indicated that 32% of its subscriber base has completely cut their home phones, up from approximately 7% about a year-and-a-half ago."[85] Another by Merrill Lynch found that "the percentage of wireless subscribers that have completely cut their home phones could be as high as 10% to 15% in some markets."[86]

Wireless is directly price competitive with wireline services, particularly when the comparison is made between equivalent bundles of service. The typical wireline customer purchases not only basic local service, but also long-distance service and some number of value-added features like call waiting, voice mail, or caller ID.[87] Wireless carriers typically provide all of these add-on services, and often for no extra charge.[88] Taking into account the whole package of service most typically sold, a Gartner Dataquest study concludes that wireless calling prices are already "competitive with, and in some case better than, wireline calling rates."[89] And wireless prices continue to decline rapidly – by as much as 10 to 20 percent a year in recent years.[90] Wireless service also provides added convenience by virtue of the fact that the wireless phone is mobile. Mobility is, self evidently, a very valuable feature, and one that has historically commanded a high price premium in the market. The attractiveness of wireless bundles has become such a threat to wireline providers that they offer competing bundles of their own.[91] *See* Table 4.

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[84] M. Kessler, *18% See Cell Phones as Their Main Phones*, USA Today (Jan. 31, 2002).

[85] *See* L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *3 (Apr. 22, 2002); *see also* Leap Wireless Press Release, *Leaping over Landline: Leap Leads Wireline Displacement Trend* (June 24, 2002) (according to a company survey, "more than 26 percent of [] Cricket customers say they do not have a traditional phone at home.").

[86] L. Mutschler, *et al.*, Merrill Lynch Capital Markets, Investext Rpt. No. 8491558, Wireless Svc: Landline Substitution: Becoming More Meaningful – Industry Report at *2 (Apr. 22, 2002).

[87] *See, e.g.*, J. Bazinet & D. Pinsker, JP Morgan H&Q, *The Cable Industry* at 50 (Nov. 2, 2001) (the average voice customer generates approximately $58 in monthly revenues, only $18 of which is for basic local service; the average revenue generated for vertical features is nearly $5, and the average revenue generated in access charges is about $5.50).

[88] *See, e.g.*, Sprint PCS, *Sprint PCS Wireless Service Plans*, http://www1.sprintpcs.com/explore/servicePlansOptionsV2/PlansOptions.jsp (all Sprint PCS service plans include voicemail, call waiting, caller ID, numeric paging, and three way calling.); T-Mobile, *Plans*, http://www.t-mobile.com/plans/default.asp (all T-Mobile plans include voicemail, call waiting, caller ID, built-in paging, and conference calling).

[89] P. Schoener & A. Sabia, Gartner, *U.S. Consumer Telecommunications and Online Market, 2001* at 33 (Nov. 8, 2001).

[90] *See, e.g., Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, Sixth Report at 6, FCC 01-192 (rel. July 17, 2001).

[91] *See, e.g.*, Verizon Press Release, *Verizon Revolutionizes Communications Service for Consumers with One Package, One Call, One Bill for Local, Long-Distance, DSL and Wireless* (Aug. 6, 2002) (Verizon's "Veriations" offering); SBC Communications Press Release, *SBC Connections Strategy "Rewards" Consumers With Comprehensive, Next-generation Bundles Featuring More Savings, Convenience, Choices* (Nov. 18, 2002) (SBC's "Total Connections" offering); BellSouth, *Residential Services, BellSouth Answers*, http://www.bellsouth.com/consumer/answers/index.html?EC; BellSouth Press Release, *Customers Enjoy More Choice and Savings from One Provider, with New BellSouth® Answers Packages* (July 29, 2002) (BellSouth's "Answers" offering).

Table 4. Examples of Bundled Service Offerings						
	Verizon Freedom *(D.C.)*	**RCN/ Starpower *Ultra Feature***	**Cingular Preferred *Nation 500* w/ Rollover**	**AT&T mLife National Next *Generation***	**Sprint PCS Free and *Clear***	**T-Mobile Get More *(National)***
Price per Month	$49.95	$47.79	$49.99 for 500 anytime, and 5,000 night/weekend minutes	$49.99 for 700 anytime minutes	$45.99 for 500 anytime, and unlimited night/weekend minutes	$39.99 for 600 anytime, and unlimited night/weekend minutes
Local	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Local Toll	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Long Distance	Yes – Unlimited	Yes – Unlimited	Yes	Yes	Yes	Yes
Vertical Services	Yes (4 plus voicemail)	Yes (8 plus voicemail)	Yes (4 plus voicemail)	Yes (6 plus voicemail)	Yes (3 plus voicemail and numeric paging)	Yes (4 plus voicemail and 50 incoming text messages)

Wireless substitution is even greater in terms of the amount of traffic that is migrating from wireline to wireless networks. Analysts have estimated that wireless traffic has displaced 30 percent of total wireline minutes.[92] This trend is accelerating as wireless minutes of traffic are growing much faster than wireline minutes.[93] Lehman Brothers estimates that wireless accounted for 30 percent of total telecom sector revenue in 2002, up from 5 percent in 1996.[94] By 2006, a Yankee Group study predicts, U.S. mobile subscribers will increase by 50 percent and will "dominate personal calling and severely cannibalize landline minutes of use."[95]

Cable operators also are competing with ILECs in the provision of telephony services. *See* Table 5. At least four incumbent cable operators – Comcast, Cox, Cablevision and Insight – have deployed commercial circuit-switched cable telephony in 20 states.[96] This service relies on

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[92] *See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise*, Communications Daily (June 27, 2003).

[93] P. Cusick, *et al.*, Bear, Stearns & Co., Inc., Investext Rpt. No. 7397790, Non-Public Operators Steal the Show . . . Again – Industry Report at *7 (May 20, 2003) ("For the next year we are looking for [wireless] minute-usage growth of 16% per user, and 26% overall as more customers are added and more telecom minutes are migrated to wireless."); *3g Rollouts Inch Along, But Kagan Research Indicates Wireless Minutes Roaring Ahead, Set to Dominate Telecom Landscape by 2005 Leading Executives to Debate Market Demand, Technology and Financing at Kagan's Wireless Telecom Summit May 2-3 in New York*, Bus. Wire (Apr. 27, 2001) (landline minutes growing in "low single digits"); *See also* P. Cusick, *et al.*, Bear, Stearns & Co., Inc., Investext Rpt. No. 7393872, Wireless Services – Searching for the Catalysts – Industry Report at *31 (May 13, 2003) (expecting "increasing minute usage as the wireline-wireless cannibalization continues.").

[94] *See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise*, Communications Daily (June 27, 2003).

[95] Yankee Group News Release, *Consumers Abandon Landlines and Increase Mobile Call Volumes, Creating Strong Growth in the Wireless Market, Reports Yankee Group* (Sept. 16, 2002).

[96] *See* M. Stump and K. Brown, *Comcast Plunges Into Telephony*, Multichannel News at 5 (Dec. 24, 2001); *Cabling Home*, Nashville Bus. J. at 17 (Feb. 1, 2002); *Annual Assessment of the Status of Competition in the Market*

the same kind of circuit switches that ILECs use to provide service, plus the cable operator's own network for both loop and transport.[97] This service is now available to more than 15 million U.S. homes – approximately 15 percent of the mass market.[98] Approximately 3 million homes currently subscribe.[99] And cable operators are adding tens of thousands of new subscribers each month.[100]

Table 5. Examples of Cable Telephony Offerings in Verizon's Region					
	Time Warner Digital Phone	**Comcast DTS Time Saver**	**Cox Connection 200**	**Cablevision Optimum Voice**	**RCN/Starpower Ultra Feature**
Service Area	Maine	Northern VA; Prince Georges County, MD	Rhode Island	Long Island, NY	Washington, DC
Features	Unlimited local, local toll, and long distance; 3 vertical services	Unlimited local service; 7 vertical services	Unlimited local service; 200 local toll or long distance minutes; 4 vertical services	Unlimited local, local toll, and long distance; 5 vertical services	Unlimited local, local toll, and long distance; 8 vertical services plus voicemail
Price per Month	$39.95	$31.55	$36.90	$34.95	$47.79

Cable telephony is already ubiquitous in some states, such as Rhode Island, where Cox has the "capability to provide cable telephony service to 75 to 95 percent of Rhode Island customers."[101] Comcast offers cable telephony services to large fractions of the nearly three

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for the Delivery of Video Programming, Ninth Annual Report, 17 FCC Rcd 26901 (2002) ("*Ninth Video Competition Report*"); T. Kerver, *Operator of the Year*, Cablevision (Oct. 22, 2001). There currently are two major cable operators – AT&T and Cox – and a third smaller one, Insight, that are actively deploying circuit-switched cable telephony to new areas. *See* Yahoo! Business, *AT&T and Comcast Remain On Watch Neg* (Dec. 20, 2001), http://biz.yahoo.com/bw/011220/202353_1.html; K. Darce, *Local Phone Arena Gets New Players*, Times-Picayune at 1 (Feb. 8, 2002); Insight Communications, *Services*, http://www.insight-com.com/services/.

[97] *See Ninth Video Competition Report*, ¶¶ 49-51.

[98] Comcast Press Release, *Comcast Full Year and Fourth Quarter Results Meet or Exceed All Operating and Financial Goals* (Feb. 27, 2003); Cox Communications Press Release, *Cox Communications Announces Fourth Quarter Financial Results for 2002; Strong Demand for Cox's Digital Services Builds Solid Foundation for Continued Growth in 2003* (Feb. 12, 2003); Cablevision Systems Press Release, *Cablevision Systems Corporation Reports Fourth Quarter 2002 Financial Results* (Feb. 11, 2003); RCN Press Release, *RCN Announces Fourth Quarter and Year-End 2002 Results* (Mar. 13, 2003); Charter Press Release, *Charter Announces 2002 Operating Results and Restated Financial Results for 2001 and 2000; Company Will Extend Filing of Form 10-K* (Apr. 1, 2003); Insight Communications Press Release, *Insight Communications Announces Fourth Quarter and Year-End 2002 Results* (Feb. 25, 2003); Knology, Inc., Form 10-K (SEC filed Mar. 31, 2003).

[99] *2002 Local Competition Report* at Table 5.

[100] Reply to Comments and Petitions to Deny Applications for Consent to Transfer Control at 11, *Applications for Consent to the Transfer of Control of Licenses Comcast Corp. and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee*, MB Docket No. 02-70 (FCC filed May 21, 2002) ("AT&T Broadband is capable of serving approximately seven million households, has enrolled over 1.15 million cable telephony customers, and is adding approximately 40,000 customers per month.").

[101] *See, e.g., Application by Verizon New England Inc., et al., for Authorization To Provide In-Region, InterLATA Services in Rhode Island*, Memorandum Opinion and Order, 17 FCC Rcd 3300, ¶ 105 (2002).

million homes its cable network passes in the Boston Area,[102] the approximately 600,000 homes it passes in the Pittsburgh area,[103] the 3.5 million homes it passes in the Chicago area,[104] and the 2.7 million homes it passes in the Bay Area.[105] Cox and Comcast boast that they have achieved penetration rates of as high as *40 percent* in the most mature markets, and 20 percent or more in even the less mature ones.[106] Cox reportedly earned margins of 35 percent from the provision of cable telephony in 2002 (and as high as 38 percent in the fourth quarter), up from between 25 to 28 percent in 2001.[107]

Cable telephony is poised to become even more widely available in the very near future. The cable operators that have not pursued circuit-switched cable telephony have done so in order to wait for voice-over-IP technology,[108] which they view as cheaper and more efficient than the circuit-switching approach used today.[109] Recently, however, a number of major cable operators

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[102] *See* Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation, July 2001, at 16 (stating that AT&T's network in Boston has "2.9 million homes passed," that "plant upgrades [are] nearly complete, [to be] able to offer complete bundle," and that there is already "11% telephony penetration" and ">100k customers.").

[103] As of mid-2000, AT&T offered cable telephony to at least 165,000 of its approximately 400,000 subscribers in the Pittsburgh Area. *See Company Offers Free Phone Service in Bid for Customers*, Associated Press State & Local Wire (Aug. 31, 2000); NCTA, *Top 25 Cable Systems*, http://www.ncta.com/industry_overview/aboutIND.cfm?indOverviewID=56. AT&T's network passes roughly 600,000 homes, assuming a nationwide cable penetration rate of approximately 66 percent.

[104] *See* Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation at 17 (July 2001) (stating that AT&T's network in Chicago has "3.5 million homes passed," a "strong telephony roll-out" with "backbone and headend segments of rebuilds nearly complete," "18% telephony penetration" and "some suburbs have 40% penetration.").

[105] *See id.* at 18 (stating that AT&T's network in the Bay Area has "2.7 million homes passed," "backbone and headend segments of rebuilds nearly complete," "19% telephony penetration" and "many communities in high 20s").

[106] *See, e.g.*, Dan Somers, President and CEO, AT&T Broadband, *Operational Overview*, AT&T Broadband, Investor Presentation at 16-17 (July 2001) ("Some [Chicago] suburbs have 40 percent penetration."); Cox Communications, *Whitepaper: Preparing for the Promise of Voice-over Internet Protocol (VoIP)* at 1 (Feb. 2003), http://www.cox.com/PressRoom/supportdocuments/VOIDwhitepaper.pdf ("in areas where the service has been available the longest, penetration is . . . up to 40 percent."); J. Granelli, *Expanding Cable Telephony Is New Kid on SBC's Block*, L.A. Times (Jan. 21, 2003) ("As of the end of September, Cox provided telephone service for 30% of the 304,000 households it has wired in 14 south Orange County cities, where nearly all the homes are hooked up. It has a similar share in the San Diego County communities it serves."); AT&T News Release, *AT&T Broadband -Comcast Merger Will Create More Competitive Marketplace* (Apr. 23, 2002) (Then AT&T chairman C. Michael Armstrong said "AT&T Broadband has already gained 25 percent or higher cable telephony penetration in 55 communities").

[107] S. Rosenbush, *Broadband Telephony*, Business Week Online (Spring 2003).

[108] A. Breznick, *Top MSOs Wait Till Next Year for VoIP Launches*, Communications Daily (Mar. 13, 2003) ("It looks like it'll be at least another year before cable operators start offering voice- over-Internet Protocol (VoIP) service commercially to their subscribers . . . [C]able operators are wary of entering an unproved market with new technology and little operating experience. Many are waiting for the further maturation of new technical standards for the technology, as well as the development of solid business models for the service."); S. Buckley, *Triple Threat: MSOs Have Multiple Options for Next-Gen Voice*, Telecommunications Americas Edition (Feb. 2002) ("Charter Communications, Time Warner and Comcast took a wait-and-see approach for full VoIP solutions.").

[109] *See* C. Kuhl, *Cable Starts Dialing For Dollars With VoIP*, Communications Engineering and Design at 12 (May 1, 2002) (Steve Craddock, Comcast's senior vice president of new media development: "All the economics

have begun deploying the service commercially. And every other major cable operator is conducting trials of IP telephony and has announced plans to deploy the service commercially in the future.

- Time Warner Cable has recently introduced the company's first commercial application of IP telephony service throughout its Maine service area, which it refers to as its "Digital Phone" service.[110] The new service "is being sold as a primary line replacement," and includes "all the requirements for lifeline service including call signaling, dynamic quality over service, 911 support and CALEA support through adjunct servers."[111] The company plans to introduce the service in at least two other markets this year.[112]

- Cablevision announced recently that it also "has started to offer [IP telephony] to select customers in the New York suburbs."[113] Cablevision plans to conduct an expanded field trial of its "OptimumVoice" primary-line VoIP service in Long Island, N.Y. this summer, which is expected to lead to a broader commercial rollout by January 2004.[114] Cablevision recently signed a contract with Siemens AG for VoIP equipment and software. According to Siemens voice-over-cable solutions manager Mike Clement, "We're definitely providing [Cablevision] with large-scale deployment capability."[115] The basic system offered by Siemens can support more than 100,000 subscribers.[116]

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of circuit switched (approaches) have been exploited, but VoIP and softswitches haven't, and are still in the R&D stage, so the costs will get even better."); J. Baumgartner, *Chasing the Fortunes of VoIP*, Communications Engineering and Design at 38 (May 1, 2003) (Sam Chernak, Comcast's vice president of VoIP: "In our view, the heart of the compelling economics of VoIP is the integration of the plant, with the same RF channel and the same device in the home supporting both high-speed data and voice service."); S. Hofstetter, *Triple Time*, Telecommunications America at 12-13 (Nov. 2002) ("While the circuit-switched model is difficult for MSOs to justify, the economics for VoIP look much more attractive.").

[110] E. Murphy, *Cable Company Expands Phone Service*, Portland Press Herald (Apr. 8, 2003) http://business.mainetoday.com/pulse/030408cablefone.shtml ("The new service replaces Line Runner, which was Time Warner's test phone service and was intended as a second phone line, said Melinda Poore, the company's director of government and public affairs. Some initial bugs were worked out, and Digital Phone is intended to be used as a primary phone service.").

[111] *See* V. Vittore, *Time Warner Cable Launches VoIP Service*, TelephonyOnline.com (May 22, 2003).

[112] A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003) (quoting Time Warner senior vice president-voice Gerry Campbell).

[113] S. Rosenbush, *Broadband Telephony*, Business Week Online (Spring 2003).

[114] A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003).

[115] *Id.*

[116] *Id.*

- Comcast began a field trial of primary-line VoIP service in Coatesville, Pa., approximately 40 miles northwest of Philadelphia. This trial encompasses five headends in an area where Comcast passes more than 180,000 homes.[117]

- Charter currently provides a primary-line digital phone service using voice-over-IP technology in parts of Wausau, Wis.[118] It also has recently completed a trial of primary-line voice-over-IP telephony in St. Louis.[119] Charter is currently "experimenting with different price points" in this system, and reports that it has quickly reached 10 percent penetration in its market area.[120]

- Cox recently initiated a six-month field trial of VoIP service in an undisclosed cable market after testing a hybrid IP-circuit switched service in Oklahoma City. Cox states that it is "prudently bullish on VoIP."[121]

- Adelphia is conducting a trial of IP telephony in Buffalo in which VoIP equipment manufacturer "Arris has done voice over IP get ready work."[122]

Cable operators are not the only companies pursuing IP telephony. Vonage – which bills itself as "the broadband phone company" – launched its DigitalVoice service using VoIP technology in New York in March 2002,[123] and expanded to the Boston region in May 2002.[124] The company introduced service to Philadelphia, Pittsburgh, the Delaware area, and southern New Jersey in September 2002,[125] and has since expanded service to markets that include Connecticut, the Washington, D.C. metro area, upstate New York, Rhode Island, New Hampshire, Harrisburg, Pa., and Norfolk, Va.[126] The company states that it provides "residents

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[117] *Id.* (quoting a Comcast spokeswoman).

[118] Charter Communications, *Wisconsin Telephone Features and Services*, http://www.charter.com/pdf/wisconsin_telephone_services.pdf; Charter Communications, *Telephone FAQs*, http://www.charter.com/products/telephone/faqs.asp.

[119] *North American Residential Cable Telephony Deployments and Trials*, CED (Apr. 1, 2003); Charter Communications, *Telephone FAQs*, http://www.charter.com/products/telephone/faqs.asp.

[120] V. Vittore, *Cable Players Tap Vendors for VOIP Service Rollouts*, Telephony at 12 (June 2, 2003).

[121] *See, e.g.*, A. Breznick, *Big MSOs Gear Up for First Cable IP Telephony Rollouts*, Communications Daily (June 9, 2003) (quoting a Cox spokesperson).

[122] *Q1 2003 Arris Group Inc. Earnings Conference Call - Final*, FD (Fair Disclosure) Wire, Transcript 042403ay.730 (Apr. 24, 2003).

[123] Vonage Press Release, *Vonage Announces the Next Generation of Broadband Phone Service with the Most Popular Features and Unlimited Calling for One Flat Rate of $39.99* (Mar. 20, 2002).

[124] Vonage Press Release, *Vonage DigitalVoice Expands Service to the Boston Region* (May 21, 2002).

[125] Vonage Press Release, *Vonage DigitalVoice Launches Service in Philadelphia* (Sept. 17, 2002); Vonage Press Release, *Vonage DigitalVoice Launches New Phone Service in Pittsburgh* (Sept. 19, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Delaware Area Code* (Sept. 20, 2002); Vonage Press Release, *Vonage DigitalVoice Launches New Phone Service in Southern New Jersey* (Sept. 23, 2002).

[126] Vonage Press Release, *Vonage DigitalVoice Launches Service in Connecticut* (Nov. 6, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Service in the Washington, DC Metro Area* (Nov. 12, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Service in the Rochester, Syracuse and Albany Areas* (Nov. 26, 2002); Vonage Press Release, *Vonage DigitalVoice Launches Service in Buffalo* (Dec. 4, 2002); Vonage Press

and small businesses a real alternative to Verizon by giving them free unlimited local and long distance phone service they install themselves, including all of the features, for an attractive price."[127] In one year, Vonage has gained over 20,000 subscribers nationwide, and transmits 1.5 million calls per week over its VoIP network,[128] and as of May 2003, the company's goal is to acquire 100,000 customers before the end of the year.[129] The company recently announced a partnership with Intrado to provide 911 emergency calling services to Vonage customers.[130] According to director of channel sales Michael Centrella, Vonage is also looking to partner with [cable] MSOs and large ISPs to "quickly sell [Vonage's] voice services to these businesses without subjecting them to major expenditures or operational impacts."[131] On June 9, 2003, Vonage announced that it partnered with Armstrong Cable "to deploy broadband telephony service to Armstrong's cable television customers."[132]

E-mail and instant messaging (IM) also now substitute for a large fraction of traffic switched on wireline networks.[133] A large and growing fraction of this traffic originates and/or terminates on competitive networks, but even when carried over ILEC networks, such traffic displaces significant usage-sensitive (*e.g.*, per-minute or per-call) revenues that the ILEC otherwise would earn. There are now 900 million e-mail accounts in the U.S. and over 60 million IM users.[134] It is estimated that consumers in the U.S. are sending approximately 3.2 billion e-mail messages and approximately 1 billion IM messages *per day*.[135] If only 10 percent

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Release, *Vonage DigitalVoice Comes to Rhode Island* (Jan. 13, 2003); Vonage Press Release, *Vonage DigitalVoice Launches Service in New Hampshire* (Jan. 14, 2003); Vonage Press Release, *Vonage DigitalVoice Launches Service in Harrisburg, Pennsylvania* (Mar. 7, 2003); Vonage Press Release, *Vonage DigitalVoice Launches Service in Norfolk* (May 14, 2003).

[127] Vonage Press Release, *Vonage DigitalVoice Launches Service in the Washington, DC Metro Area* (Nov. 12, 2002).

[128] Vonage Press Release, *Vonage Becomes First Broadband Telephony Provider To Activate 30,000 Lines* (June 16, 2003).

[129] *See* Vonage Press Release, *Vonage Calls the Gardner-Nelson Project* (May 6, 2003).

[130] Vonage Press Release, *Intrado and Vonage Digital Voice Partner To Provide Emergency Calling Solution* (Mar. 25, 2003).

[131] Vonage Press Release, *Vonage Shifts Its Channel Sales Toward Retail, E-Tail, ISPs and MSOs* (Mar. 21, 2003).

[132] Vonage Press Release, *Vonage Digital Voice Announces Private Label Partnership with Armstrong* (June 9, 2003). Vonage announced a similar agreement with Advanced Cable Communications the next day. Vonage Press Release, *Vonage Digital Voice Announces Private Label Partnership with Advanced Cable Communications* (June 10, 2003).

[133] *See, e.g.*, S. Flannery, *et al.*, Morgan Stanley, Investext Rpt. No. 7406622, Wireline Telecom Services – Trend Tracker: Bottom Line Better – Industry Report at *29 (May 23, 2003) ("In the local market, access minutes of use (from long distance and CLEC carriers) decreased 8% [in first quarter 2003], versus [fourth quarter 2002's] 9.8% decline. MOU growth has been weak in recent quarters for a number of reasons. First, we've seen a migration of traffic to dedicated access services, which are based on fixed charges rather than on switched access minutes of use. Second, and perhaps more importantly, we believe substitution of switched minutes to wireless, email, and other technologies is also having an impact, as wireless minutes are not typically included in the MOU count reported by the Bell companies.").

[134] *See* D. Whelan, *The Instant Messaging Market*, American Demographics (Dec. 2001).

[135] *See* R. Gann, *Fast Talking Instant Messaging Software*, Internet Magazine at 140 (Jan. 1, 2001).

of the 4.2 billion daily e-mail and instant messages substitute for a voice call, that is equivalent to about 750 billion minutes per year, or roughly one-third of all voice traffic that passes through ILEC networks.[136] And while estimates vary, consumer surveys find that the actual rate of voice substitution is considerably higher.[137]

Facilities-based competition has also come from a number of carriers – including RCN, Knology, and WideOpenWest – that have deployed their own broadband pipe (generally either hybrid fiber coax or pure fiber) to provision high-speed bundled service offerings to individual neighborhoods or the approximately 30-35 percent of the population that live in multi-dwelling units.[138] These carriers now serve at least 353,000 subscribers and offer service to at least 1.7 million homes.[139] In Verizon's region, RCN has deployed networks in New York, Massachusetts, Pennsylvania, Maryland, and Washington, D.C. to compete with Verizon. Several CLEC affiliates of incumbent LECs – including PennTel and Hickory Tech – have also taken this approach.[140]

Finally, there continue to be a large number of carriers that operate competitive networks that they use primarily to serve business customers. According to ALTS, for example, "there are approximately 100 facilities-based CLECs in operation today,"[141] which operate nearly 10,000 switches (both circuit and packet),[142] and hundreds of thousands of route-miles of fiber.[143] Data

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[136] Ind. Anal. & Tech. Div., FCC, *Statistics of Communications Common Carriers* at Table 5.8 (2000/2001 ed. 2002) (Total 1999 Dial Equipment Minutes of 4.414 trillion divided by 2 yields 2.207 trillion conversation minutes; 750 billion/2.207 trillion = 33%).

[137] *See, e.g., Welcome to InstantMessagingPlant.com*, InstantMessagingPlanet.com (Oct. 15, 2001) http://www.instantmessagingplanet.com/features/article/0,,2841_903101,00.html. (According to an InsightResearch survey "[f]orty-seven percent of consumers said they use instant messaging. And of those, 96 percent said they use IM at home and 20 percent use instant messaging at work. . . . Nearly half of all respondents, 49 percent, use instant messaging as a replacement for a telephone call while one third, 35 percent, use it in place of sending an e-mail."); M. Dano, *IBM Enters Wireless Instant Messaging Arena*, RCR Wireless at 28 (June 25, 2001) (According to the Gartner Group, 60 percent of all real-time online communication – voice or text – will be driven through instant messaging technology.); T. Chea, *Workplace Is Being Altered By E-Mail*, Wash. Post at E07 (June 29, 2000) (In a study by Vault.com, 45 percent of respondents said e-mail has replaced phone calls.).

[138] *See, e.g.*, Robert Currey, Vice Chairman, RCN Corporation, Prepared Testimony before the Senate Subcommittee on Antitrust, Business Rights, and Competition, Committee on the Judiciary, *Cable and Video: Competitive Choices*, Federal News Service (Apr. 4, 2001) ("About 30-35 percent of the population lives in multiple dwelling units (MDUs), such as apartments, cooperatives or condominiums.").

[139] *See* Knology, Inc. Press Release, *Knology Reports Strong Operating Results in First Quarter of 2003* (May 13, 2003) (Knology, Inc. on-net telephone connections and marketable homes passed); RCN Corp. Press Release, *RCN Announces First Quarter 2003 Results* (May 14, 2003) (Total RCN connections: voice and Total RCN marketable homes); D. Hayes, *Are Overbuilders Keeping Pace?*, CED (Apr. 2002); A. Bryer, *Wide Open West Finds It's Tough to Beat the Incumbent*, Denver Bus. J. (Apr. 5, 2002).

[140] New Paradigm Resources Group, Inc., *Competitive IOC Report*, Ch. 4 at 2 (1st ed. 2001).

[141] *ALTS 2003 Report* at 7.

[142] *Id.* (CLECs operate 1,221 voice switches and 8,740 data switches).

[143] New Paradigm Resources Group, *CLEC Report 2003*, Ch. 4 at Table 12 & Ch. 5 (17th ed. 2003).

compiled by the FCC demonstrate that CLECs have captured approximately 23 percent of lines provided to "medium and large business, institutional, and government customers."[144]

Although extensive facilities-based local competition has emerged, virtually all of the major independent analysts also now recognize the negative impact that the rapid rise of the UNE-P at TELRIC rates is having on that competition. For example, Legg Mason notes "the losses to UNE-P in recent quarters, including the migration from UNE-loops to UNE-platform,"[145] and observes that "UNE-P reduces [the] voice opportunity" for cable operators.[146] Salomon Smith Barney has recently stated that "the UNE platform remaining an option for competitive entry . . . is negative for all companies providing local telephony or planning to enter that business, including cable companies. Cox Communications, in particular, and Comcast (through AT&T Broadband) are most affected on a longer-term basis."[147] Credit Suisse First Boston "turned pessimistic about the extent to which Cox . . . will generate money from offering local telephone service over its cable TV systems" due to "the long-distance carriers' use of UNE-P [that] has picked up speed of late."[148] Morgan Stanley commented that cable companies are "negatively affected by UNE-P."[149] Facilities-based carrier Allegiance Telecom – which recently has declared bankruptcy – has likewise indicated that low UNE-P prices "mak[e] it more difficult for efficient facilities-based [competitive local exchange carriers] to compete."[150]

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[144] *2002 Local Competition Report* at Table 2.

[145] M.J. Balhoff, *et al.*, Legg Mason Wood Walker, Investext Rpt. No. 7301106, Shift in RBOC Valuations – Industry Report at *15 (Apr. 1, 2003); *see also* R.E. Talbot, RBC Capital Markets, Investext Rpt. No. 7229059, Integrated Telecommunication Services – Moderating Expectations for Triennial Review – Industry Report at *13 (Feb. 18, 2003) ("Competitor UNE Lines with CLEC switching declined to 35% (or 4.1 million) of total UNE switched lines. This compares to 39% (3.7 million) in the preceding six months and 67% as at December 1999. We expect this trend to continue as CLECs pursue UNE-P based strategies in additional markets.").

[146] B. Levin, Legg Mason, *Washington Telecom & Media Insider* at 2 (Feb. 21, 2003); *see also* B. Levin, *et al.*, Legg Mason Wood Walker, *WorldCom/MCI Bundled Phone Offer Challenges Rivals, Regulators* at 4 (Apr. 23, 2002) ("Given how the [Neighborhood] plan affects the attractiveness of telephony to new facilities-based providers, the states may have to shift some of the costs . . . if they want to encourage new facilities-based competitors, such as cable."); *see also UNE Fact Report 2002*, § V, *attached to* Comments and Contingent Petition for Forbearance of the Verizon Telephone Companies, *Review of the Section 251 Unbundling Obligation of Incumbent Local Exchange Carriers*, CC Docket No. 01-338 (FCC filed Apr. 5, 2002).

[147] N. Gupta, *et al.*, Salomon Smith Barney, Investext Rpt. No. 7238096, Cable – UNE-P Ruling Has Mixed Impact on Cable – Industry Report at *1 (Feb. 21, 2003); *see also* J. Bazinet, *et al.*, JP Morgan, *The Regulatory Handbook: 2003; The Implications of Pending Regulatory Changes in the Telecom, Media, and Cable Sectors* at 13 (Jan. 16, 2003) (JP Morgan has stated that "[w]e believe the [cable] voice business could be positively affected if unbundled network element obligations are dropped. If they are, the ILECs will no longer be required to provide their voice network to new competitors entering the market. That would leave more of the market for cable companies, like Cox or Comcast.").

[148] G. Mannes, *Cox Prospects for Growth May Be Fading*, The Street.com (Sept. 19, 2002), http://www.thestreet.com/tech/georgemannes/10043045.html (citing Credit Suisse First Boston analyst Lara Warner).

[149] S. Flannery, *et al.*, Morgan Stanley, Investext Rpt. No. 8821267, Wireline Telecom Services – The Local Report: A Break in the Clouds? at *9 (Oct. 8, 2002).

[150] *See* Letter from Kevin M. Joseph, Vice President Government Affairs, Allegiance Telecom, Inc., to Magalie Salas, FCC, CC Docket No. 96-98, Attachment at 2 (Feb. 2, 2001).